

Memorandum For Safety Managers, TRADOC Installations, Schools,
and Activities

SUBJECT: Lightning Protection for Soldiers in Training

1. DCG/CofS memorandum dated 22 Feb 02 directed installation commanders to conduct a review of their existing lightning protection programs to determine if existing measures and facilities are adequate.
2. The TRADOC Engineer is the proponent for this task and each TRADOC installation was asked to complete an assessment of their current lightning protection shelters. The TRADOC Engineer included the current acceptable standard for lightning protection shelters for the command. On completion, installations are to provide this headquarters with the status and number of existing shelters, the number of required shelters. The estimated cost to construct additional shelters or to bring existing shelters into compliance with the TRADOC standard was also requested.
3. At many installations, the focus of this review has been limited to the existence or lack of adequate lightning protection shelters (LPS). While properly constructed, grounded lightning shelters may be an important part of a fully functioning, effective lightning protection program; they should not be the first measure of protection considered. The construction of costly lightning protection shelters should not be undertaken before other protection measures are addressed and implemented. Want to ensure you provide your installation engineers the technical assistance needed during this assessment is complete and addresses elements of lightning protection beyond the construction of protection shelters.
3. Early warning and evacuation provide the best protection against the hazards of severe weather. Want to ensure your review of lightning protection for soldiers goes beyond the construction of shelters and addresses the total scope of the protection effort. Your review should start with an analysis of historical data on lightning strike experience for your installation/geographic area to define the hazard and level of protection required. Next, consider the plans and policies

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established to provide guidance, fix responsibility, and disseminate information. A functional severe weather plan that defines responsibilities, lists acceptable standards, and provides alternative actions when implemented must be known by all affected activities and rehearsed to maintain an acceptable level of proficiency. The severe weather plan should include:

a. Early warning systems. Existence, type, and reliability of early warning systems must be identified and responsibility for monitoring fixed. Televised weather radar, local weather monitoring stations, military airfields employing full-time Air Force Weather Service, and/or on site weather detection systems such as radar or storm scopes all provide a means of early warning. To be effective in providing protection these systems must have the capability of detecting approaching storm systems and/or lightning at a minimum distance of 50 miles from location of training/outdoor activities.

b. Communications. Communications must be reliable, redundant, and checked to ensure timely notification of approaching severe weather is provided and received by all "at risk" organizations. Commanders must establish and enforce policies that require all units and organizations operating or training on the installation to establish and maintain redundant, positive 2-way communications with range control. Notification of impending severe weather must be timely, accurate, and must include acknowledgement from the receiving organization that the warning has been received and understood. Notification procedures should identify organizations in an order of precedence that ensures the most expedient process for alerting, removing, and/or sheltering exposed troops in training areas.

c. Transportation and evacuation criteria. Severe weather plans must also address transportation and evacuation. Training areas in situations where extraction from an area is the most acceptable action, a means of extraction must be identified and available.

d. On-site protection measures. Each training area or range must be surveyed and an on-site severe weather plan

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developed. Specific instructions should identify actions to be taken in the event of severe weather. Evacuation from the area, dispersal within the area, or movement into existing lightning protection shelters should be addressed in detail and the responsible cadre or using unit/organization leadership aware of the plan for their training area.

4. Utilizing the above guidance you should be able to provide your engineers the essential information to make their assessment more accurate and complete. Also recommend you use this opportunity to adjust or modify existing severe weather plans to provide the measure of protection our soldiers deserve.

5. Copies of the engineer tasking, LPS standard, and cost assessment worksheet may be obtained from this office by emailing Mr. Milton Hilliard (hilliardm@monroe.army.mil) or by calling DSN 680-2418.

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